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# PRE-APPEAL BRIEF REQUEST FOR REVIEW

| Docket Number (Optional) |
|---|
| 02940086CA |

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| Application Number | Filed |
|---|---|
| 10/759,280 | 01/20/2004 |

| First Named Inventor |
|---|
| J. Peart |

| Art Unit | Examiner |
|---|---|
| 1616 | J. H. Alstrum Acevedo |

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☑ attorney or agent of record.
Registration number **35,884**

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

Mary E. Goulet

Signature

**Mary E. Goulet**
Typed or printed name

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Telephone number

**October 5, 2006**
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.
Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Tradeamrk Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of
Peart et al.
Serial No. 10/759,280
Filed: January 20, 2004

Confirmation No. 6861
Group Art Unit: 1616
Examiner: Alstrum Acevedo, James Henry

For: ***"Δ⁹ TETRAHYDROCANNABINOL (Δ⁹ THC) SOLUTION METERED DOSE INHALERS AND METHODS OF USE"***

Mail Stop AF
Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

**ATTACHMENT TO PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Sir:

This Pre-Appeal Brief Request for Review is being concurrently filed in the USPTO with a Notice of Appeal. A check is attached to satisfy the fees for a Notice of Appeal. A Petition for Extension of Time (one month) along with appropriate statutory fee are submitted herewith, making this filing timely. If any additional fees are required to satisfy the fees due for the Notice of Appeal or to gain entry and consideration of this Pre-Appeal Brief Request for Review, the Commissioner is authorized to charge Attorney's Deposit Account 50-2041 (Whitham, Curtis, Christofferson & Cook).

**The Invention**

An inventive pharmaceutical composition comprises a hydrofluoroalkane (HFA), $\Delta^9$-tetrahydrocannabinol (THC), and up to 15% by weight of an organic solvent, said $\Delta^9$-THC and said

organic solvent being dissolved in said HFA to form a stable composition, wherein said $\Delta^9$-THC is present in said composition in concentrations ranging from 0.147% w/w (±0.008) to 5.940% w/w (±0.191). (Claim 43.) Another inventive pharmaceutical composition comprises a HFA, a THC, and up to15% by weight of an organic solvent, said THC and said organic solvent being dissolved in said HFA to form a stable composition, wherein said THC is present in said composition in concentrations ranging from 0.147% w/w (±0.008) to 5.940% w/w (±0.191). (Claim 50.)

The invention also includes a method of administering a pharmaceutically effective dose of aerosolized THC to a patient, by steps including: providing a solution comprising a pharmaceutically acceptable form of said THC in a HFA (the solution having not more than 15% by weight of a pharmaceutically acceptable solvent); aerosolizing said solution to provide respirable droplets comprising said THC, wherein at least 20% of the mass of said respirable droplets comprise droplets having an aerodynamic diameter of less than 5.8 μm; and administering a pharmaceutically effective dose of said respirable droplets to said patient's lungs. (Claim 23.)

Another inventive method is of administering a pharmaceutically effective dose of medical marijuana to a patient. Steps include: providing a solution comprising a pharmaceutically acceptable form of said medical marijuana in a HFA, said solution having not more than 15% by weight of a pharmaceutically acceptable solvent; aerosolizing said solution to provide respirable droplets comprising said medical marijuana, wherein at least 20% of the mass of the respirable droplets comprise droplets having an aerodynamic diameter of less than 5.8 μm; and administering a pharmaceutically effective dose of said respirable droplets to said patient's lungs. (Claim 37.)

**Errors and Omissions (*The Obviousness Rejection*)**

Applicants respectfully submit that the Examiner has erred by rejecting Claims **23**, 26-28, 30-35, **37**-44, 46-48, **50**, and 53-55 under 35 U.S.C. 103(a) as being unpatentable over Mechoulam or Volicer, in view of McNally[1] and by rejectingClaims **43**-48, **50**, and 52-55 under 35 U.S.C. 103(a) as

[1]Applicants also submit that the Examiner has erred by rejecting Claim 36 as being unpatentable over Mechoulam, Volicer, Nally, and the 1997 "Appetite Stimulation" reference, by rejecting Claims 25, 45, and 52 based on Mechoulam, Volicer, McNally and Pars, by rejecting Claims 25, 45 and 52 based on Mechoulam, Volicer, McNally and Pars, and by rejecting Claim 29 over Mechoulam, Volier, McNally, and Ohlsson.

being unpatentable over Pars in view of McNally.

Applicants rebutted the *prima facie* case of obviousness with evidence, and it is legally impermissible for the Examiner just to return to his own rebuttable assumptions when the Examiner can state no defect with the evidence. The Examiner has no specific point of disagreement with any of Applicants' submitted evidence. For example, the Examiner has not stated even one sentence or phrase in the Declaration of Dr. Weer dated 27 March 2006 with which he disagrees or takes any issue.

2) The obviousness rejections are based on an assumption by the Examiner that a person of ordinary skill in the art would have been motivated to prepare THC formulations using HFA propellants instead of CFCs because CFCs were being phased out in favor of propellants, such as hydrocarbons, which were known to be less harmful to the ozone layer. That assumption has been rebutted by Applicants' submitted evidence. The Examiner has not directly challenged any of Applicants' submitted evidence. It is not proper for the Examiner to simply return to his basic underlying assumption when Applicants' evidence shows to the contrary. The evidence of record is that: "One of ordinary skill in the art would have recognized that solubilizing drugs in HFA propellants is a difficult and challenging hurdle in the preparation of acceptable MDI formulations. It would be particularly surprising and unexpected to one of ordinary skill in the art that the solubility of THC in HFA propellants is high." (Dr. Weers Declaration, paragraph 4.) This evidence particularly cannot be ignored or given low weight by the Examiner because Dr. Weers has explained why in scientific detail, and the Examiner has not disagreed with any of the underlying scientific reasoning and detail in Dr. Weers' Declaration (pages 2-9).

3) At page 5 of the final office action, the Examiner discusses the primary McNally reference and respirable fraction. The McNally reference fails to teach or disclose THC. As Applicants' evidence shows, THC poses special challenges and problems, and a reference's disclosure about how to work with a non-THC substance is not pertinent.

4) At pages 5-6 of the final office action, the Examiner cites Radhakrishnan USP 5,192,528 and Burns USP 5,284,133. Radhakrishnan concerns corticosteroid drugs, which are, e.g., aldosterone, beclomethasone, betamethasone, budesonide, cloprednol, cortisone, cortivazol, deoxycortone, desonide, dexamethasone, difluorocortolone, fluclorolone, fluorocortisone,

flumethasone, flunisolide, fluocinolone, fluocinonide, fluorocortolone, fluorometholone, flurandrenolone, fluticasone, halcinonide, hydrocortisone, meprednisone, methylprednisolone, paramethasone, prednisolone, methylprednisolone, prednisone and triamicinolone – not THC. Note that Burns only generally concerns MDIs and patient compliance, and fails to teach or disclose working with THC. Burns states: "Examples of the types of drugs which have been routinely provided by these aerosolizing devices include: β-agonists such as albuterol (salbutamol), isoproterenol, ephedrine, epinephrine, salmeterol, terbutaline; corticosteroids such as triamcinolone acetonide, beclomethasone diproprionate, dexamethasone, and aldosterone; allergic mediators such as cromclyn sodium; antibiotics; and anticholinergics." What Radhakrishnan and Burns were disclosing for non-THC substances is not pertinent; the Declaration of Dr. Weer clearly explains THC as a problem case, not susceptible of generalizations about other substances, and it is not legally permissible for the Examiner to ignore this evidence specific to THC and return to incorrect generalizations which are at odds with the knowledge and background of a person of ordinary skill in Applicants' art at the time of the invention.

The *prima facie* case of obviousness has been rebutted by Applicants. The Examiner has disagreed with not even a sentence in the submitted Declaration of Dr. Weer. It is legally impermissible for the Examiner to return to his rebutted *prima facie* obviousness position.

**Conclusion**

In view of the above, it is requested that the position of the Examiner be reviewed, that the anticipation rejection be withdrawn, and that the application be awarded a notice of allowance.

Respectfully submitted,

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